## CLAIMS

1. A filter, comprising:

a light distribution component having an output side; and

a plurality of array waveguides configured to deliver a light signal into the light distribution component such that the light signal is incident on the output side of the light distribution component, the array waveguides being configured to adjust the location where the light signal is incident on the output side.

2. The filter of claim 1, wherein at least a portion of the array waveguides includes one or more effective length tuners.

3. The filter of claim 2, wherein the effective length tuners are configured to change the effective lengths of array waveguides such that the amount of an effective length change between adjacent array waveguides is a constant.

4. The filter of claim 3, wherein the amount of the effective length change is different for each array waveguide including an effective length tuner.

5. The filter of claim 3, further comprising:

electronics for operating the effective length tuners so as to change the effective length such that the amount of the effective length change between adjacent array waveguides is a constant.

6. The filter of claim 2, wherein each effective length tuner has a different effective area and the effective area for each effective length tuner is not positioned adjacent to the light distribution component, the effective area being the area of the effective length tuner that causes the change in effective length.

7. The filter of claim 2, wherein each effective length tuner has an effective area and the difference in the effective area for adjacent array waveguides is a constant, the effective area being the area of the effective length tuner that causes the change in effective length.

8. The filter of claim 7, wherein the effective area of each effective length tuner is different.

9. The filter of claim 2, wherein each effective length tuner has an effective area with a different average length and the difference in the average length for adjacent array waveguides is a constant.

10. The filter of claim 9, wherein the array waveguides each have a different average length and the difference in the average length of adjacent array waveguides is a constant, the difference in the average length of adjacent array waveguides being less than the average length of the effective area for adjacent array waveguides.

11. The filter of claim 2, wherein the length of an effective area of each effective length tuner is different for each array waveguides and the difference in the length for adjacent array waveguides is a constant.

12. The filter of claim 2, wherein the effective length tuner is not positioned adjacent to the light distribution component.

13. The filter of claim 2, wherein the effective length tuner of each array waveguide is positioned adjacent to a portion of the array wavcguide.

14. The filter of claim 2, further including electrical conductors to provide electrical communication between at least a portion of the effective length tuners.

15. The filter of claim 2, wherein the effective length tuners are temperature control devices.

16. The filter of claim 2, wherein each effective length tuner includes a plurality of electrical contacts.

17. The filter of claim 2, wherein each array waveguide is at least in part defined by a ridge and at least a portion of each effective length tuner is positioned over a ridge.

18. The filter of claim 1, wherein the light signal is one of a plurality of light signals.

19. The filter of claim 1, further comprising:

one or more output waveguides in optical communication with the light distribution component.

20. A filter, comprising:

a light distribution component having an output side; and

a plurality of array waveguides configured to deliver a light signal into the light distribution component such that the light signal is incident on the output side of the light distribution component, at least a portion of the array waveguides including effective one or more length tuners, each effective length tuner configured to change the effective length of an array waveguide.

21. A filter, comprising:

a light distribution component having an output side;

a plurality of array waveguides configured to deliver a light signal into the light distribution component such that the light signal is incident on the output side of the light distribution component; and

an effective length tuner positioned adjacent to a plurality of the array waveguides, the effective length tuner configured to change the effective length of the array waveguides such that the location where the light signal is incident on the output side of the light distribution component changes.

22. The filter of claim 21, wherein the effective length tuner has a wedge shape.

23. The filter of claim 21, wherein the effective length tuner is configured to change the effective length of a plurality of the array waveguides such that the amount of the effective length change between adjacent array waveguides is a constant.

24. The filter of claim 21, wherein the effective length tuner has an effective area that is not positioned adjacent to the light distribution component, the effective area being an area of the effective length tuner that causes the change in effective length.

25. The filter of claim 21, wherein the effective length tuner has an effective area positioned adjacent to a portion of the length of at least a portion of the array waveguides, the effective area being an area of the effective length tuner that causes the change in effective length.

26. The filter of claim 21, wherein the effective length tuner has an effective area positioned adjacent to a portion of the array waveguides, the difference in the portion of an array waveguide that is adjacent to the effective area for adjacent array waveguides being a constant.

27. The filter of claim 21, wherein the effective length tuner is a temperature control device.

28. The filter of claim 21, wherein the effective length tuner includes a plurality of electrical contacts.

29. A method for operating an optical filter, comprising:

obtaining an optical component having a plurality of array waveguides in optical communication with an input side of a light distribution component, the array waveguides being configured to deliver a light signal into the light distribution component such that the light signal is incident on the output side of the light distribution component; and

changing the effective lengths of at least a portion of the array waveguides such that the location where the light signal is incident on the output side of the light distribution component changes.

30. The method of claim 29, wherein the effective lengths of at least a portion of the array waveguides are changed so the light signal appears on one or more output waveguides in optical communication with the light distribution component.

31. The method of claim 29, wherein the effective lengths of at least a portion of the array waveguides are changed such that the difference in the amount of the effective length change for adjacent array waveguides is a constant.

32. The method of claim 29, wherein the effective lengths of at least a portion of the array waveguides are changed such that the difference in the amount of the effective length change is different for each of the array waveguides.

33. The method of claim 29, wherein changing the effective length of an array waveguide includes changing the temperature of the array waveguide.

34. The method of claim 29, wherein changing the effective length of an array waveguide includes passing a current through the array waveguide.

35. The method of claim 29, wherein changing the effective length of an array waveguide include creating an electrical field in the array waveguide.

36. The method of claim 29, wherein obtaining the optical component includes selecting from a group consisting of receiving the optical component from a supplier and fabricating the optical component.

37. The method of claim 29, wherein the light signal is one of a plurality of light signals.